

## **ABSTRACT**

A channel equalizer of a terrestrial digital TV receiver using a VSB modulation method is disclosed. By using a precise channel estimator according to the LS method, the transmission channel can be precisely estimated regardless of the characteristic of the transmission channel. By performing the channel equalization in the frequency domain based on the estimated channel, since the channel can be precisely compensated for, and a firm frame synchronization is supplied even to the time-varying multiple path channel, it can be exhibited superior performance even a mobile channel. Moreover, since the FFT implemented by hardware simpler than the transversal filter of the time domain can be used, the equalization is performed not the time domain but the frequency domain, a longer equalizing range can be obtained.